King Fahd University of Petroleum & Minerals

Department of Mathematics & Statistics STAT-319-Term172 *Quiz-4-06* ID:

Name:

Serial:

The stock price for a company is thought to be fairly normal. Given this information, if a sample of 36 independent stock prices is selected with a mean equal to \$1.30 and a standard deviation of \$0.45,

a. Find and interpret a 95 % confidence interval for the true mean.

b. You want to estimate the population mean stock prices with 99% confidence with error margin at most 0.05. Find the minimum sample size necessary for this estimation.